Meeting the CHALLENGE



The Challenge managing our flood waters. The Instrument your decision.

The Floods of '97

Beginning January 1, 1997 and over the course of three days, thirty inches of rain fell on an already saturated Central California. This rainfall led to record volumes of runoff; filling the reservoir system and leading to record flood flow releases.

The result: the rivers pushed beyond their banks, damaging levees statewide and forcing tens of thousands to evacuate. Twenty-nine counties in the state were declared emergency areas with damages approaching \$2 billion.

The question: Can we prevent a repeat of this disaster? What measures can we take to prevent or lessen the effects of flood waters? There is something you can do. Read on

Over the next several months and years, property owners, municipalities, and reclamation districts will be asked to make important decisions regarding the management of their floodplains and flood losses. Traditionally, structural measures such as levees and dams have successfully been used in efforts to control flood waters.

Despite these efforts, homes, businesses, and infrastructure continue to be flooded. Many acknowledge an inherent risk and related impacts, and for some the impacts and the ongoing risk are becoming unacceptable. Those who wish to provide input on how they are personally impacted by flooding now can participate in tandem with a new management tool.

Any future action must deal with a difficult matter regarding the risk. A decision must be made by those impacted by the flooding (agricultural interests, commercial, industrial and the general public) and in agreement with each other. No one person, department or agency can make this decision; it must be a unified decision from all affected parties.

In this brochure and subsequent literature, the programs and tools to help you make these decisions will be described that can help "meet the challenge."

HISTORY AND THE CORPS' COMMITMENT

The flooding of 1997 produced record volumes of runoff and record damages. Federal, state, and local rescue teams responded quickly providing shelter, immediate action, and recovery procedures to help reduce flood impacts and damages.



Photo: Courtesy of Robert A. Eplett/OES



What is Public Law 84-99?

Public Law (PL) 84-99 is a short-term recovery program established by Congress that authorizes the U.S. Army Corps of Engineers to provide emergency assistance for flood response and post-flood recovery activities to save lives and protect improved property during or following a flood or coastal storm. Assistance to individual homeowners and businesses is not permitted. This includes agricultural lands.

Supported by a White House directive to balance structural and nonstructural strategies and ensuing legislative changes in the application of PL 84-99, the Corps of Engineers has been directed to consider nonstructural alternatives. The Corps has initiated activities and set a goal of completing repairs by November 1, 1997.

Photo: Courtesy of Robert A. Eplett/OES



The U.S. Army Corps of Engineers in cooperation with local partners, through its Emergency Response Program, was there helping to quickly restore a 25-year level of flood protection in levee failure areas enrolled in the Corps program.

Following the flood, the Corps initiated a process to address the long-term repair of those levees enrolled in the PL 84-99 Program. Of 80 potential areas, 63 locations requested assistance. The Corps is currently preparing the design and implementation of repairs to these areas. However, unlike previous flood recovery efforts where structural repair of the levee was the only alternative, Congress has now made it possible to consider the implementation of a nonstructural alternative.

The Corps' short- and long-term direction in this effort is also consistent and compatible with the recommendations of the Governor's recently released Flood Emergency Action Plan (FEAT) Report, which examines the future of flood policies in Central California.

AGENCY COORDINATION AND PUBLIC COOPERATION

The consideration of nonstructural alternatives to flooding is a new effort in California. A strategy including the use of nonstructural measures is currently being examined by joint federal and state programs and authorities, especially those of the PL 84-99 Program. Significant coordination is taking place between state and federal agencies to understand the barriers and opportunities for implementation. Several parallel and cooperative efforts are also underway. Over the next several months, groups such as FEAT, The Reclamation Board, the Department of Water Resources, the Federal/State Interagency Task Force, CALFED, local governments, industry and other participating interest groups will be





working to shape the policy and potential for nonstructural implementation.

THE QUESTION AND YOUR DECISION

This presents an opportunity and a decision for the local sponsors and property owners participating in the PL 84-99 Program. Do you want to proceed with the structural repair, restoring your levee to the pre-flood level of protection? Or do you want to consider partnering with other flood-prone parties to explore the implementation of nonstructural alternatives?

Things to consider:

- I. Under the PL 84-99 Program, the Corps would be able to expend funds now (up to the amount justified for a structural repair) on nonstructural alternatives. Once funds are expended on the structural repair, no longer would PL 84-99 funds be available for nonstructural implementation.
- 2. Various groups are interested in funding the implementation of nonstructural alternatives and are seeking ways to help pay for nonstructural implementation if the costs exceed those which the Corps can contribute.
- 3. If local sponsors opt to consider a nonstructural alternative, they can temporarily delay the decision whether to opt for a structural fix. This would also mean a delay of construction of the structural fix, leaving the localized area with a 25-year level of protection as provided through the previously installed emergency repairs. This provides local sponsors with the flexibility to consider nonstructural alternatives as well as the decision to manage the risk. It also provides opportunities for them to optimize the use of available funding for this purpose.

What are Nonstructural Alternatives?

Nonstructural measures are defined as techniques such as acquisition and floodproofing that modify susceptibility to flooding, as opposed to structural methods that modify flooding, like dams and levees. They are another set of tools used to reduce flood damages. (For example, as opposed to modifying the flow of waters as do traditional flood control devices, nonstructural measures modify the susceptibility of a property to flood damages.)

Types of nonstructural approaches that could be considered are: the property acquisition from owners who choose to sell, the purchase of flowage easements from property owners with uses that can sustain occasional flooding, and strategies directed at increasing the width of the floodway.

Other examples of nonstructural alternatives include:

- relocation of facilities out of a floodplain;
- · acquisition of floodprone property (in fee, open space, or easements);
- flood protection by elevation of damage-prone structures;
- · appropriate floodplain management actions.

YOUR CONSIDERATION AND CONTRIBUTION

To meet your needs, we want to provide you with the tools and the opportunities necessary for a successful recovery program.

What we ask of you is to consider the vision you have for your flood prone properties for now and in the future.

CONTACTS

For information on flood fight operations and the PL 84-99 Program, please contact:

Mr. Kell Cloward, Chief

Readiness Branch

Sacramento District

U.S. Army Corps of Engineers

(916) 557-6911

For information on nonstructural alternatives, please contact:

Mr. Bill Fakes

Nonstructural Alternatives Program Manager

Sacramento District

U.S. Army Corps of Engineers

(916) 557-6609

For information on Interagency Task Force activities, please contact:

Mr. Paul Dobie

Interagency Task Force

FEMA Disaster Field Office

Mather, CA

(916) 364-3030

For information on levee rehabilitation, please contact:

Ms. Debra Carlisle, Chief

Levee Rehabilitation Unit

The Reclamation Board

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ACRONYMS

FEAT (Flood Emergency Action Team)
PL (Public Law)
ITF (Interagency Task Force)

CALFED (a consortium of California and Federal Agencies):

California Agencies:

The Resources Agency
Department of Fish and Game
Department of Water Resources
California Environmental Protection Agency
State Water Resources Control Board
The Reclamation Board

Federal Agencies:

Environmental Protection Agency
Department of Interior Fish and Wildlife Service
Bureau of Reclamation
Department of Commerce National Marine Fisheries Service

Department of Defense -

U.S. Army Corps of Engineers

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